[0036] (6) The pressure sensors 22a-22d could be eliminated and a scale sensor, or detector, could be mounted on each device 16a-16d to directly detect the presence of scale, and any other foreign materials, and generate a corresponding output signal which is transmitted to the control unit 24 for use in the above manner.

[0037] (7) The control unit 24 can be in the form of a microprocessor, or any other type of data processing device.

[0038] The foregoing descriptions of specific embodiments of the present invention have been presented for purposes of illustration and description. They are not intended to be exhaustive or to limit the invention to the precise forms disclosed, and obviously many modifications and variations are possible in light of the above teaching. The embodiments were chosen and described in order to best explain the principles of the invention and its practical application, to thereby enable others skilled in the art to best utilize the invention and various embodiments with various modifications as are suited to the particular use contemplated. It is intended that the scope of the invention be defined by the claims appended hereto and their equivalents.

[0039] What is claimed is:

1. A system for use in a wellbore, comprising:

a device for supporting a gravel pack in the wellbore;

at least one acoustic transducer mounted in the wellbore and coupled to the device;

a tool adapted to be inserted in the wellbore in the vicinity of the acoustic transducer; and

an electrical driver mounted on the tool and adapted to drive the acoustic transducer to vibrate the device.

2. The system of claim 1 further comprising a cable assembly connected to the electrical driver for supplying electrical power to the driver to enable the electrical driver to drive the acoustic transducer.

3. The system of claim 1 wherein vibration of the device breaks up any scale on the device and stimulates a formation penetrated by the wellbore.

4. The system of claim 1 wherein the at least one acoustic transducer comprises two acoustic transducers mounted in the wellbore and coupled to the device, wherein the acoustic transducers are axially-spaced in the wellbore and adapted to vibrate the device.

5. The system of claim 1 wherein the acoustic transducer comprises an electromechanical transducer that vibrates in response to an electrical signal.

6. The system of claim 5 wherein the acoustic transducer is selected from the group consisting of a tuning fork, a cantilevers, an oval-mode tool, a magnetostrictive driver, and a piezoelectric transducer.

7. The system of claim 1 wherein the electrical driver is connected to a source of electric power and produces an electrical output that drives the acoustic transducer.

8. The system of claim 1 further comprising:

a sensor for sensing the amount of scale accumulating on the device and outputting a signal when the accumulated scale exceeds a predetermined value; and

means responsive to the signal for actuating the electrical driver.

9. The system of claim 8 wherein the sensor comprises pressure sensors disposed on opposite sides of the device.

10. The system of claim 8 wherein the sensor is a scale detector.

11. The system of claim 8 wherein the means comprises:

a microprocessor for receiving the signal from the sensor; and

a telemetry device for collecting data from the microprocessor and transmitting the data to the ground surface.

12. A method of vibrating a device for supporting a gravel pack in a wellbore, comprising the steps of:

sensing a condition of the device;

outputting a signal when the condition exceeds a predetermined value;

lowering a tool into the wellbore; and

actuating a driver on the tool in response to the signal for driving an acoustic transducer coupled to the device for vibrating the device.

13. The method of claim 12 further comprising the step of supplying electrical power to the driver to enable the driver to drive the acoustic transducer.

14. The method of claim 12 further comprising the step of providing an electrical cable to the driver to provide the electrical power to the driver.

15. The method of claim 14 wherein the step of lowering the tool is after the step of outputting the signal.

16. The method of claim 12 further comprising the step of coupling the device to two axially-spaced acoustic transducers disposed in the wellbore for vibrating the device.

17. The method of claim 12 wherein the step of sensing comprises the step of sensing pressure on opposite sides of the device.

18. The method of claim 12 wherein the step of sensing comprises the step of detecting the scale with a scale sensor.

19. The method of claim 12 wherein the step of outputting a signal when the accumulated scale exceeds a predetermined value further comprising the steps of:

generating data corresponding to the amount of scale; and

transmitting the data to ground surface for processing.

20. The method of claim 19 wherein the step of lowering the tool is in response to the step of transmitting the data to the ground surface.

21. The method of claim 12 wherein vibration of the device stimulates a formation penetrated by the wellbore.

22. The method of claim 12 wherein vibration of the device mobilize fines inside the gravel pack.

23. The method of claim 12 wherein vibration of the device breaks up any scale on the device.

24. The method of claim 23 further comprising the step of producing the scale recovered from the device out of the wellbore with production fluid.

25. The method of claim 23 further comprising the step of circulating the scale recovered from the device out of the wellbore with non-production fluid.

25. A system for use in a wellbore, comprising:

means for supporting a gravel pack in the wellbore;

means coupled to the supporting means for vibrating;

a tool adapted to be inserted in the wellbore in the vicinity of the supporting means; and

means mounted on the tool for driving the vibrating means to vibrate the supporting means and stimulate a formation penetrated by the wellbore.

26. The system of claim 25 wherein the vibrating means is adapted to vibrate in response to receiving electrical power, and the driving means supplies the electrical power to the vibrating means.

27. The system of claim 26 wherein the vibrating means is an acoustic transducer.

28. The system of claim 27 wherein the driving means produces electrical power to drive the acoustic transducer.